

^x₁₅₉
₃₂₂ never tasted anything like it. Wheat flour makes me sick! I think it has no strength. But when I am weak, when I am tired, my grandchildren make me gruel out of the wild seeds. That is *food*.

^x₁₅₉
₈₆₈ I used to help my mother. When I was very little I began to grind the seeds, just for a short time. When I was ten years old I did it all, for then a daughter should be able to take over the work and let her mother sit down to baskets. But I am telling you about the early days when I could only grind a little. Then we pulled the grinding slab inside the house by the fire and my mother knelt behind it. I picked the dirt out of the seeds and handed them to her, and the pot boiled on the hearth on the three stones that we kept there.

^x₁₅₉
₆₂₂ My father was very busy, for he was the chief of our village. People used to bring their quarrels to him, and I remember him sitting crosslegged under the arbor we had to keep off the sun, listening with his head bent and his arms folded, while people talked.

[624] "My daughter disappeared with a man on the last night of the maiden's dance. I want her beaten." "How many stripes?" "Twenty." "Fifteen," said my father. He was a gay man who liked to war and to gamble. He did not like to beat women.

^x₁₅₉
₅₂₅ Some days nobody would come, and then he would gamble with the other men, throwing the sticks that we use for dice, and then moving stones around a circle as many moves as there were marks on the stick. We used to hear the men singing in a low tone, before they threw, to give them luck:

[797] Down I shall throw
 The smooth stone I shall move
 Move it to the corner:

^x₁₅₉
₂₇₆ They smoked, too, and I can smell their tobacco yet, the strong wild tobacco that we do not have any more. It was tied in a long corn husk, so white, so nice, and when one man passed it to another he said: "Friend!" And the other said, "Friend."

^x₁₅₉
₅₉₂ When the sun was high, high, my brothers and my sister came home, and as each one came my mother gave them food. She dipped the gruel out of the pot into a bowl, for my mother was a good potter. We all had bowls in our house. Only my father and my mother ate out of the same one laughing together, because they liked each other. When my mother dipped out our food she said: "Do not eat it hot. You will have wrinkles." She set mine on the grinding slab to cool. "It will make you industrious," my mother said. My father said to the boys: "Do not eat it hot, no matter

3. Underhill E-5 (1931-1935) 1936

NU28 Papago NU28

UNDERHILL]

THE AUTOBIOGRAPHY OF A PAPAGO WOMAN

9

how hungry you are. Wait till it has scum on it. So you will be a runner and not a fat man." ^{159x}_{264●}

When we had finished we did not wash the dishes. How could we, with no water! We scooped food out with our knuckles. The boys used two knuckles because men have time to eat. We girls used three because women must hurry and work. When we were through it was only my father who could wipe his fingers between his toes. That was because he was a warrior and had killed enemies. The rest of us wiped them on the ground and rubbed our hands together. I do not like water on my dishes even now. They feel so smooth. ^[70]

Then we made our toilet. We washed our faces in a little cold water, but we did not bathe. Rubbing yourself with earth does just as well. Then the older girls painted themselves with beautiful red paint, all in dots and splashes. I went out to play. ^{159x}₆₁₅₃₀₂

I played with the boys and girls who were children of my uncles. Brothers and sisters, we call them. We had no clothes, any of us, but we were not cold. We went to a sunny place and made ourselves dolls of mesquite leaves tied with strings of corn husk for arms and legs and head. We had a little stone for the grinding slab and some sand for the corn. The boys had men dolls and they would take them away and say: "We go hunting." "Well, go," said the wives. Then the boys would hunt all around the village and find a deer bone. "Here is a deer for you." ^{159x}₂₅₇_[291]_[524]

Sometimes the boys went to get rats. They poked them out of the holes and hit them with sticks. Then we roasted them on sticks with the skins on. Good food, that used to be! ^[262]

Sometimes we went to run races. We had a good racetrack in our village. Our men had cleared a road that ran across the flat land as far as you could see, and every day they swept it with greasewood branches to keep off the thorns. They had a song: ^{159x}₅₂₆_[533]

The hawk made the race-track
And on it we won
A-a-ah!

We ran with the hawk
And won a Hawk's heart
A-a-ah!

All our young men and girls practised on that racetrack so they could run fast against the other villages. We children ran, too. Every day I ran until I was ten years old and had to be doing the house work.

THE DESERT PEOPLE

513 push the wide wooden slats together and lay blankets on them. Beds stand in the yard in summer, with the bedding rolled up during the day to keep it clean; in winter they are moved indoors.

264 Eating arrangements are also characteristically elastic. In the eastern districts, where every house has a table and chairs, family meals are the general practice, but no one is concerned if some member arrives late or not at all. Fiestas are the only occasions when group eating seems important.

262 No longer does the desert furnish all the food. Only two wild plants are still important in the Papago diet: the cholla bud and the fruit of the saguaro cactus. These plants are good sources of sugar, vitamins, and minerals.¹ Various seeds and wild greens are still gathered in season, but decreasing use of wild products has followed the introduction of stores on the Reservation, and Papago food is now rather like lower-class Mexican or Yaqui food. The usual three family meals each day are much alike in basic pattern: coffee, tortillas or bread, and some bean or other legume, which "makes the meal." These foods are supplemented by other vegetables and sometimes by meat, cheese, and eggs. Green corn is used in many forms—fresh, or dried and roasted and then ground for boiling alone or with black-eyed beans. Wheat is used in whole-wheat tortillas or bread and as pinole. Squash is boiled or baked, either fresh or dried, and several varieties of peas are also eaten. Principal meats in the diet are beef and chicken, but their use varies with the economic status of the family, for not all have cattle or poultry, and meat in the stores is expensive. Rabbits and other wild game provide additional meat.

527 The fiesta is the occasion when delicacies are set forth. Fiesta foods include
262 tamales and beef stew, with raisin rice pudding or canned fruit for dessert. Baker's bread and cake are greatly esteemed. Food for the fiesta is carefully planned and prepared, and an effort is made to serve the choicest dishes. In the home, however, it is considered pure ostentation to set too good a table.

146 Many Papago children show signs of malnutrition,² as the modern Papago
262 diet has deficiencies, the most serious of which is in vitamin C. In those seasons when fresh vegetables and wild greens are not available, the Papago eat very few foods which are rich in this vitamin; oranges and tomatoes are not grown on the Reservation and are expensive to buy. Nor is vitamin A very plentiful in the diet. Milk is used almost exclusively in coffee, and the total amount consumed is limited. School children must learn to drink milk, as many adults believe that undiluted it is bad for the stomach. As noted in

1. For a comprehensive study of Papago diet see Emma Reh, "An Economic Study of the Papago Indian Reservation, Arizona" (MS).

2. See Part III of the study.

5: Castetter & Bell N-5 (1938-1940) 1942

NU28 Papago NU28

Sima NU29

HARVEST, STORAGE AND SEED SELECTION

207

layers of wheat straw or bean vines, and watermelons. Sides^{Pi}
of the pit were not lined. For a roof, poles were laid across^{Pa}
the opening and a layer of arrowweed covered with dirt over²⁵¹
all. Earth at one end of the pit was dug away to allow a
vertical entrance about three feet high, which was covered
with a framework of slender poles. Watermelons thus stored
kept well for as much as three to four months. Informants
said they kept better if a six-inch section of the vine was left
attached to the fruit at the time of picking.

Watermelon and muskmelon seed for planting was always^{Pi}
selected on the basis of size and quality of fruits, thus from^{Pa}
the largest and sweetest specimens. [242]

Utilization

Fruits when ripe, particularly watermelons, were com-^{Pi}
monly eaten fresh in great quantities, although at times^{Pa}
preserves were made from the rind by cooking without^[252]
sweetening. Watermelons were never dried. Muskmelons
did not store well so had to be eaten relatively soon after
maturity, or dried for future use.

The method for drying muskmelons was similar to that
described for pumpkins, except that the melon was peeled
and cut lengthwise, the soft pulp and seeds scraped away.
Only thoroughly ripened fruits were used in this manner.
The short straight strips were then dried on top of the house
or *ramada* for several days, or until they could be worked
well. A number of strips were placed side by side and tied
into bundles, dried further on a shed, twisted into hanks and
stored in baskets, or in ollas with a cloth over the contents,
covered with a piece of broken olla, then sealed with mud.
In spring they were eaten dry without boiling or preparation
of any kind unless they had become quite hard, in which case
they were boiled and eaten with pinole. At times the dried^{Pi}
melon was toasted over a fire to soften, then eaten by alter-^{Pa}
nately taking pieces of melon and drinking pinole. This^[264]
practice is very rare today. Unlike pumpkins, such dried

DOUBLE BALL GAME WITH STICK 89

609 have done credit to any stage. It was a busy morning, and when the crowd saw us getting ready to eat our belated breakfast, they considerably said, "Let us retire that they may eat." Pablo and I seated ourselves near the fire, and it was a small matter that the rice had been burned during the activities of the morning.

526 After a while, we had them all back again. The implements used in a woman's game were offered for sale. They comprised a small object, consisting of two short, thick sticks from the cat-claw tree, linked together in the middle by a twisted leather string. This *óla*, as they call it, has to be thrown with a thin pole, slightly curved at the point, and the movement must be made by applying the point between the two connecting sticks and then casting it upward. The game consists in throwing the object so as to reach a certain goal, the opposing party trying to prevent it. At my request, the woman with the imitative gift induced four young girls to show me how the game was played, and they immediately prepared for the fray. The colored bandannas were disengaged from around the head and tied around the hips. The uncovering disclosed beautiful black hair, well-groomed *à la mexicaine*, parted in the middle, and hanging in two generous braids down the back. The next minute they all spat in their hands and smoothed their hair, then the game started. The girls played two against two. The *óla* was first thrown up in the air, the players standing ready opposite each other. The tactics of the opponents was to run with their backs turned against the others and strike the disputed ob-

QUALITIES OF BARBAROUS MAN 345

302 The men frequently have slight moustaches. At
[142] present the men all have their hair cut short, but a lux-
[822] uriant growth was formerly considered a standard of
[824] beauty. It was occasionally washed with an infusion
[751] from the roots of a vine called *ádofi*. Sometimes these
natives would plaster the head with clay, to kill para-
sites and ensure a better growth of hair. The women
still take great care of this ornament to their persons and
are often seen brushing it with brushes made from the
roots of sacaton grass. With the children, it is cut so
that it may grow strong, and the cut hair is twisted into
a cord which is used in tying together parts of the bur-
den basket as well as in the tying of the saddle-bag.
Formerly the custom was to leave the children's hair
long on top of the head, back of the neck, and in front
[147] of each ear. I saw a left-handed man and a left-handed
woman in the tribe. If it be permissible to draw any
[513] general conclusions from the sound sleep of my com-
panion, Pablo, these natives sleep unusually soundly.
One morning, while he was with me, he woke up several
yards below his bedding, having rolled down a declivity
during the night in his sleep. The Papago avoid eating
● 208 food hot from the fire.

157 They possess much force and stability of character,
are quick of perception, loyal to the white man that
they like, and if in danger do not cry for help. Under
her natural bashfulness the woman hides sterling quali-
ties of efficiency in household work, constancy, and faith-
ful adherence to duty. These Indians are industrious
and have a remarkably even temper; thirty children

ETHNOBIOLOGICAL STUDIES

[15

The small succulent plants used as greens grow near²²² the villages and can usually be gathered within a day's²⁵² excursion. One informant said: "In the afternoon, my mother-in-law would say to us, 'let us go out and gather amaranth.' So I and my sisters-in-law would take our carrying nets; walk about half a mile from the camp and fill them. Then we made soup and that was all we had^[264] for supper" (the main meal). This and the other small greens mentioned are never dried and stored but, as with other fresh crops, the family lives on them almost exclusively while they last. The branches of the saltbush (*Atriplex wrightii*)^[263] are used for seasoning either in cooking or in pit-baking.

The buds and joints of the five species of *Opuntia* mentioned constitute a staple crop, probably because they grow so plentifully, and *O. echinocarpa* is found in abundance on the nearby hillsides.

The branches of the chollas are composed of easily de²²² tachable joints; the flower buds which develop at the tips of the branches are gathered as they come out in May. Whole cholla joints, as well as the buds, are pit-baked and dried. Women go out in parties to gather the crop, this^[417] being done with wooden tongs made of a length of giant cactus rib (*Carnegiea gigantea*), split in two. The buds or joints are collected in coiled basket bowls and brought to a central point where an old woman directs the baking. When the picking is ended, a pit is dug, stones placed in²⁵¹ it and heated with a mesquite fire (*Prosopis velutina*), since creosote bush (*Covillea glutinosa*) burns up too quickly. When the stones are hot they are removed and the pit lined with ink weed (*Dondia nigra*) or with grass. Next a layer of buds or joints is placed in the pit, then hot stones, then the pit filled with alternate layers of ink weed or grass and buds and covered with earth. They camp all night while the product is baking, and roast in the campfire ashes that^[264] portion of the product which has been reserved for their evening meal. The women carry home the roasted cholla

252 it hardened into a lump, called the "mesquite turtle," and pieces could be broken off and eaten just as they were.

Breadstuffs were used much less often than gruel. The most common was the tortilla made of cornmeal and water. Flattened balls of this dough were quickly cooked on a heated pottery griddle; or they might be baked in the ashes of the hearth, thus making a sort of ash bread. Among the Papagos of Sonora, however, wheat flour tortillas were and still are dominant. Cottonseed flour (*Gossypium* sp.) and sahuaro seed flour which are oily, made very good browned cakes when baked on sand heated under hot stones.

262 Gruel or bread was the basis of every meal and the
● 264 usual addition was boiled dehydrated vegetables. All greens
252 like aloe (*Agave americana*) and cholla joints (*Opuntia* sp.) had been pit-baked before storing, while root crops and the cultivated squash and beans had been simply sun-dried. All of these were taken from the storage jars and soaked both to freshen them and to remove dirt, then boiled with water and salt. A favorite dish was a form of succotash, made of dried teparies and corn grains.

252 Fresh greens like amaranth (*Amaranthus palmeri*)
262 and fresh squash were also boiled, but, since water was scarce, anything that was juicy enough was roasted. This was the treatment for the flower stalks of aloe and sotol (*Dasylirion wheeleri*), the joints of cholla, cañaigre greens (*Rumex hymenosepalus*), and squash. Ashes were raked out of the fire and the vegetables buried in them. In a period of marked water shortage dehydrated vegetables also could be treated in this way after the first soaking.

263 The sweets, highly prized, were dried fruits, fruit jam, fruit syrup, and honey. Sahuaro (*Carnegie gigantea*), pitahaya (*Lemaireocereus thurberi*), and prickly pear (*Opuntia* sp.) fruits could be dried and stored in jars, but not for long because they became wormy. Syrup and jam from all these fruits were made when they were picked. The flowers of mesquite (*Prosopis velutina*), ironwood (*Olneya tesota*), and species of yucca have a good deal of nectar. These

271
466 While drinking water supplies in most of the region's labor camps were reasonably satisfactory and sanitary--if not very convenient--the story in the harvest fields had a different plot. Workers in the cotton harvest need a high water intake because the work is hard and hot. During the early part of the season, the blazing Arizona sun makes it even hotter, raising the water requirement. But in the fields is just where water is least available.

Cotton farmers or their contractors or foremen haul water to the fields for pickers to drink. But sometimes they fail to keep up with demand, and hands gripe and swear because they must work dry--and in danger from heat prostration. Fortunately for workers, these failures are comparatively rare.

Sanitary considerations are more or less forgotten in providing water for the hands in the fields. Some contractors provide barrels with spigots, but most in 1950 had acquired their containers hit or miss, and laborers got a drink by dipping from an open container. Even spigoted barrels usually sported only one drinking cup. Lack of individual drinking cups in the intense heat made ideal conditions for transmission of every contact-communicable disease.

264
466
461 Most harvest hands either ate prepared lunches in the fields about 10 or 11 a.m. (having started work at 7 or earlier), or walked back to the labor camp for a quick snack. However, many contractors profited off their crews by operating small stores at the scales where pickers could purchase soft drinks, pastries and other prepared foods, and tobacco products. A few performed a real service for their crews--at a price--by operating mobile lunch stands serving hot coffee and sandwiches and even hamburgers. Lunch fare of pickers observed in this study was far from ideal for hard workers.